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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,647	02/02/2004	Robert Puckette	TRMB1414	1578

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EXAMINER

ELAMIN, ABDELMONIEM I

ART UNIT	PAPER NUMBER
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2116

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/770,647

Applicant(s)

PUCKETTE, ROBERT

Examiner

Abdelmoniem Elamin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-8,12-13,15-21 and 23 is/are rejected.
- 7) ☒ Claim(s) 4,5,9-11 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: it depends from claim 11.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6, 8, 13, 18, 20-21, 23, are rejected under 35 U.S.C. 102(e) as being anticipated by Kudo et al, US. Pat. No. 6,799,157 (*cited in the previous office action*).

4. Claims 1, 18, 20, Kudo teaches an electronic processing boot up system [*se the system of Fig. 2*] comprising:

a bus for communicating information [*buss 22 of Fig. 2*];

a processor coupled to said bus, said processor for processing said information

[*CPU 12 of Fig. 2*]; and

a read only memory (ROM) emulation system coupled to said bus [*emulation memory 32 of Fig. 2*], said read only memory (ROM) emulation system for making boot up information available to said processor [*abstract*].

5. Claims 6, Kudo teach said read only memory (ROM) emulation system permits reprogramming and recovery after a system crash [*abstract, col. 5, lines 5-22, col. 11, lines 17-33*].

6. Claim 8, Kudo teaches an electronic processing boot up method [*abstract*] comprising: initiating an initial memory fetch; performing a read only memory (ROM) emulation process [*col. 8, lines 26-35*]; and passing control to an operating system [*inherently, once the boot code completes its execution, control is passed to the operating system*].

7. Claim 13, Kudo teaches implementing of a ready handshake Protocol. [*Inherently,*

8. Handshake packets are used to perform a ready handshake after transfer of a data or control

9. Packet to acknowledge successful receipt or indicate unsuccessful receipt].

10. Claims 21 Kudo teaches a volatile memory for receiving boot up instructions from said non-volatile memory and completing a bootstrap sequence [*emulation memory 32 of Fig. 2*].

11. Claim 23, Kudo teaches a controller said component includes a field programmable gate array [*col. 4, lines 3 7-38*].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2-3, 7, 12, 15-17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo et al, US. Pat. No. 6,799,157.

14. Claims 2, 12 (as understood by Examiner), 15, 19, Kudo fails to teach a NAND flash memory.

Official Notice is taken that both the concept and the advantages of NAND flash memory is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Kudo to include a NAND flash memory, because NAND flash memories are advantageous when seeking high integration density because they consume significantly less current than NOR flash memories.

15. Claims 3, Kudo teaches a controller said component includes a field programmable gate array [*col. 4, lines 3 7-38*].

16. Claim 7, Kudo teaches a joint task action group (JTAG) port for directly controlling electrical signals in said electronic processing boot up system to effect programming of said NAND flash memory with system software [*see Fig. 6 and related discussion*].

17. Claims 16, Kudo teach balance of bootstrap information is retrieved from random access memory (RAM) [*emulation memory 32 of Fig. 2*].

Claims 17, Kudo teaches bad pages of a NAND flash memory are marked and skipped when copying information from said NAND flash [*Inherently, bad pages of a NAND flash memory are marked and Slapped when copying information*].

Allowable Subject Matter

18. Claims 4-5, 9-10, 11 (*if it is corrected to depend from 10*) and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

19. Applicant's arguments filed on 10/26/2006 have been fully considered but they are not deemed to be persuasive for the following reasons:

In the remarks, the applicant argues as follows:

a. "Kudo's emulation memory 32 is not coupled to Kudo's CPU bus 22." [see page 7, REMARKS].

b. "the Office Action did not point out any portion of Kudo that teaches "passing control to an operating system."" [see page 7, REMARKS].

20. The examiner responses as follows:

a. Kudo's emulation memory 32 of Fig. 2 is coupled to bus22 via bus control unit (BCU) 14 of Fig. 2.

b. Inherently, once the boot code completes its execution, control is passed to the operating system.

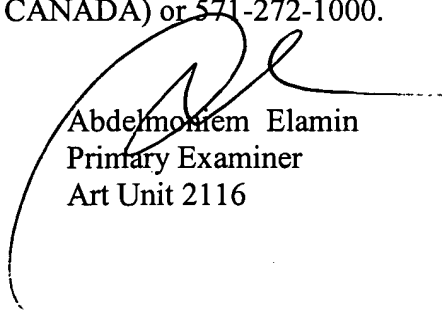
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelmoniem Elamin whose telephone number is 571-2727-3674. The examiner can normally be reached on MON - THUR 10:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Prveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Abdelmoniem Elamin
Primary Examiner
Art Unit 2116

January 17, 2007